REMARKS

In response to the Office Action of October 16, 2006, claims 1 and 2 are amended. Claim 1 was rejected under 35 U.S.C. § 112, second paragraph; claims 1-5 and 8 were rejected under 35 U.S.C. § 102(b); and claims 1-9 and 10 were rejected under 35 U.S.C. § 103(a). Each of these rejections is discussed below.

The inconsistency of the phrase "a phosphonic compounds" in claim 2 noted by the Examiner has been corrected.

Rejections under 35 U.S.C. § 112, second paragraph

The Examiner has rejected claim 1 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner notes that claim 1 has two periods and contains misspellings of the words "muriatic" and "phosphorus." The Examiner also notes that the phrases "include, but not limited to" and "selected from but not limited by" are unacceptable. In response to this rejection, claim 1 has been amended to correct each of these errors. Applicant therefore respectfully requests that the Examiner withdraw this rejection.

Rejections under 35 U.S.C. § 102(b)

The Court of Appeals for the Federal Circuit has stated that anticipation requires the presence in a single prior art reference of each and every element of the claimed invention. *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458 (Fed. Cir. 1984); *Alco Standard Corp. v. Tennessee Valley Auth.*, 1 USPQ2d 1337, 1341 (Fed. Cir. 1986). "There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." *Scripps Clinic v. Genentech Inc.*, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991, citations omitted).

The Examiner has rejected claims 1-5 and 8 under 35 U.S.C. § 102(b) as being anticipated by WPIDS Abstract 1986-007470. The Examiner reasons that this reference

explicitly discloses the plant growth regulator 2-chloroethanephosphonic acid in combination with several ingredients including 1.6% acetic acid and thus, clearly anticipates claim 1. In response to this rejection, independent claim 1 has been amended to exclude acetic acid. As applied to claims 2-5 and 8, the Examiner notes that the combination of ingredients is disclosed as synergistic and is applied to plants. Applicant asserts that contrary to the Examiner's reasoning there is no teaching or suggestion that acetic acid actually contributes to the synergistic effect of composition of matter taught by this reference. The composition is comprised of four components other than ethephon, only 1.6% of which is acetic acid. Although Applicant does not acquiesce to this rejection, independent claim 2 has also been amended to exclude acetic acid. Applicant maintains that claims 1 and 2, as amended, and claims 3-5 and 8 which depend from claim 2 are not anticipated by the prior art relied upon by the Examiner and respectfully requests that this rejection be withdrawn.

The Examiner has rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Derwent Abstract 1997-133542. The Examiner reasons that this reference explicitly discloses the combination of 2-chloroethylphosphonate with 1-5 parts citric acid and as such anticipates claim 1. In response to this rejection, independent claim 1 has been amended to exclude citric acid. Applicant believes claim 1, as amended, is not anticipated by the prior art relied upon by the Examiner and respectfully requests that this rejection be withdrawn.

Rejection under 35 U.S.C. § 103(a)

The Examiner bears the burden of establishing a *prima facie* case of obviousness under 35 U.S.C. § 103. In determining obviousness, one must focus on Applicant's invention as a whole. *Symbol Technologies Inc. v. Opticon Inc.*, 19 USPQ2d 1241,1246 (Fed. Cir. 1991). The primary inquiry is:

> whether the prior art would have suggested to one of ordinary skill in the art that this process should be carried out and would have had a reasonable likelihood of success . . . Both the suggestion and the expectation of success must be found in the prior art, not in the applicant's disclosure.

In re Dow Chemical, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988). To establish obviousness, both the elements of the claimed invention plus the motivation to combine the elements must be present in the prior art. *Ex parte Hiyamizu*, 10 USPQ2d 1393, 1394 (PTO Bd. App. Intf., 1988).

The Examiner has rejected claims 1-9 under 35 U.S.C. § 103(a) as being unpatentable over WPIDS Abstract 1986-007470 in view of The Farm Chemicals Handbook '98. The Examiner reasons that the WPIDS Abstract discloses that the plant growth regulator 2-chloroethanephosphonic acid in combination with several ingredients including 1.6% acetic acid provides a synergistic mixture. The Examiner further reasons that The Farm Chemical Handbook teaches that ethephon is a widely used plant growth regulator, which is used on crops such as cotton and that a pH of less than 3 is required to stabilize this compound. From this the Examiner concludes that the double advantage of synergism, as taught by the WPIDS Abstract, and less decomposition, as taught by The Farm Chemical Handbook, would have motivated the ordinary skilled artisan to apply a combination of ethephon and acetic acid to plants with the expectation of increased efficiencies.

The instant invention as set forth in claims 1 and 2, as amended, is drawn to compositions comprised of a combination of specific acids with phosphonic compounds and methods of using said compositions to increase the efficacy and efficiency of said phosphonic compounds. The compositions are formed by mixing an acid selected from the group consisting of hydrochloric acid, muriatic acid, nitric acid, phosphoric acid, phosphorus acid, poly phosphoric acid, and perchloric acid with one or more phosphonic acids, selected from (2-chloroethyl)phosphonic acid and salts thereof. As detailed in the Abstract of the Invention, these compositions significantly increase the efficacy and efficiency, as well as the effective speed these compounds. As noted above, claims 1 and 2, as amended, exclude acetic acid. Furthermore, Applicant notes that there is no teaching or suggestion that acetic acid in any way contributes to the synergistic effect of the composition of matter taught by the WPIDS Abstract. As noted above, the composition is comprised of four components other than ethephon, only 1.6% of which is acetic acid. Even assuming for the sake of argument, however, that acetic acid does in fact contribute to the synergistic effect, there is no teaching or suggestion that any acid other than acetic acid would

also provide a synergistic composition. The Farm Chemical Handbook reference, which only teaches that ethephon is a widely used plant growth regulator that is stable below a pH of 3 does not cure this defect. For these reasons, Applicant maintains that the references cited by the Examiner either taken alone or in combination do not render the composition and method of the instant invention obvious. Applicant therefore respectfully requests that the Examiner reconsider this rejection.

If it would be helpful to obtain favorable consideration of this case, the Examiner is encouraged to call and discuss this case with the undersigned.

This constitutes a request for any needed extension of time and an authorization to charge all fees therefore to deposit account No. 19-5117, if not otherwise specifically requested. The undersigned hereby authorizes the charge of any fees created by the filing of this document or any deficiency of fees submitted herewith to be charged to deposit account No. 19-5117.

Respectfully submitted,

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